BRUHAT BANAGLORE MAHANAGARA PALIKE

Executive Engineer-Yelhanka Division

Detailed Estimate

Name of the Work : Improvements to roads and drains at Attur village Attur layout ,santhosh Nagara, Muneshwara nagara in ward no-3

			Estimate Amount :				20000000.00		
Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	CIVIL WORKS								
1	**Removing BS Slab** of drain and Stacking **(Page No 25., I.No.5.32 of KPWD S.R 2015-16).**								
		Sqm							
	1st Cross road from Attur main road to 11th main road								
	BOX Drain								
	LHS								
	Ch: (56 - 82)		1	26		1.50	39.00		
	Ch: (121 - 145)		1	24		1.50	36.00		
	Ch: (152 - 177)		1	25		1.50	37.50		
	RHS								
	Ch: (121 - 145)		1	24		1.50	36.00		
	Ch: (152 - 177)		1	25		1.50	37.50		
	Slabs								
	LHS								
	Ch: (0 - 56)		1	56	0.90		50.40		
	Ch: (82 - 121)		1	39	0.9		35.10		
	Ch: (145 - 152)		1	7	0.9		6.30		
	Ch: (177 - 209)		1	32	0.9		28.80		
	Deduction for Cross roads (7+4.9+5.5+7.1+6.5+ 5.5= - 36.5)		-1	36.5	0.90		-32.85		
	RHS								
	Ch: (0 - 121)		1	121	0.90		108.90		
	Ch: (145 - 152)		1	7	0.9		6.30		
	Ch: (177 - 209)		1	32	0.9		28.80		
	Deduction for Cross roads (7+4.9+5.5+7.1+6.5+ 5.5= - 36.5)		-1	36.5	0.90		-32.85		
	2nd Cross road from 11th main road to Atturmain road								
	BOX Drain								
	RHS								
	Ch: (178 - 205)		1	27		1.50	40.50		
	Slabs								
	LHS								
	Ch: (52 - 297)		1	245	0.90		220.50		
	Deduction for Cross roads (7.4+7+7+6+5.5+4.9+ 6= - 43.8)		-1	43.8	0.90		-39.42		
	RHS								
	Ch: (52 - 178)		1	126	0.90		113.40		
	Ch: (205 - 297)		1	92	0.9		82.80		

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	Deduction for Cross roads (7.4+7+7+6+5.5+4.9+6= - 43.8)		-1	43.8	0.90		-39.42		
	3rd Cross road from Attur main road to 11th Main road								
	Slabs								
	LHS								
	Ch: (0 - 296)		1	296	0.75		222.00		
	Deduction for Cross roads (5.5+6+8+6.3+6+7.2+6.5+8.2+7+7= - 67.7)		-1	67.7	0.75		-50.78		
	RHS								
	Ch: (0 - 296)		1	296	0.90		266.40		
	Deduction for Cross roads (7.4+7+7+6+5.5+4.9+6= - 43.8)		-1	43.8	0.90		-39.42		
	4th Cross from 9th main road to Atturmain road								
	BOX Drain								
	LHS								
	Ch: (126 - 150)		1	24		1.50	36.00		
	RHS								
	Ch: (221 - 244)		1	23		1.50	34.50		
	Slabs								
	LHS								
	Ch: (0 - 126)		1	126	0.90		113.40		
	Ch: (150 - 260)		1	110	0.90		99.00		
	Deduction for Cross roads (6.2+6+6.3+8+7.7+6+6.7+6.5= - 53.4)		-1	53.4	0.90		-48.06		
	RHS								
	Ch: (0 - 221)		1	221	0.90		198.90		
	Deduction for Cross roads (6.2+6+6.3+8+7.7+6+6.7+6.5= - 53.4)		-1	53.4	0.90		-48.06		
	5th Cross Road from Atturmain road to 2nd Cross road								
	Slabs								
	LHS								
	Ch: (0 - 52)		1	52	0.90		46.80		
	Deduction for Cross roads (6= - 6)		-1	6	0.90		-5.40		
	RHS								
	Ch: (0 - 52)		1	52	0.90		46.80		
	Deduction for Cross roads (6= - 6)		-1	6	0.90		-5.40		
	5th Cross road from cross road to (3rd main) Dead end								
	Slabs								
	LHS								
	Ch: (85 - 207)		1	122	0.90		109.80		

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	Deduction for Cross roads (7.5+12.7= - 20.2)		-1	20.2	0.90		-18.18		
	RHS								
	Ch: (0 - 52)		1	52	0.90		46.80		
	Deduction for Cross roads (7.5+12.7= - 20.2)		-1	20.2	0.90		-18.18		
	6th Cross road from Atturmain road to dead end (Cross Road)								
	BOX Drain								
	LHS								
	Ch: (0 - 19)		1	19		1.50	28.50		
	Ch: (24 - 82)		1	58		1.50	87.00		
	Ch: (89 - 181)		1	92		1.50	138.00		
	Ch: (267 - 272)		1	5		1.50	7.50		
	RHS								
	Ch: (189 - 256)		1	67		1.50	100.50		
	Slabs								
	LHS								
	Ch: (189 - 256)		1	67	0.90		60.30		
	RHS								
	Ch: (0 - 267)		1	267	0.90		240.30		
	Deduction for Cross roads (5.5+6.1+7.5= - 19.1)		-1	19.1	0.90		-17.19		
	Cross road from 3rd main road (vidyaneketan english medium school) to dead end								
	BOX Drain								
	LHS								
	Ch: (29 - 120)		1	91		1.50	136.50		
	RHS								
	Ch: (36 - 120)		1	84		1.50	126.00		
	Slabs								
	LHS								
	Ch: (0 - 29)		1	29	0.90		26.10		
	RHS								
	Ch: (0 - 36)		1	36	0.90		32.40		
	Deduction for Cross roads (6.7= - 6.7)		-1	6.7	0.90		-6.03		
	Cross Road from 3rd main road to 9th main road								
	Slabs								
	LHS								
	Ch: (0 - 180)		1	180	0.75		135.00		
	Deduction for Cross roads (7+6+6.7+7+7= - 33.7)		-1	33.7	0.75		-25.28		
	RHS								
	Ch: (0 - 180)		1	180	0.75		135.00		
	Deduction for Cross roads (7+6+6.7+7+7= - 33.7)		-1	33.7	0.75		-25.28		
	2nd main road from Yelahanka main road to Dead end								
	Slabs								

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	LHS								
	Ch: (0 - 450)		1	450	0.90		405.00		
	Deduction for Cross roads (9.2+8.1+8+6.4+6.5= - 38.2)		-1	38.2	0.90		-34.38		
	RHS								
	Ch: (0 - 450)		1	450	0.75		337.50		
	Deduction for Cross roads (7+6+6.7+7+7= - 33.7)		-1	33.7	0.75		-25.28		
							3612.36	**63.72**	**230179.58**
2	**Refixing Stone Slabs** of drains and Pointing in C.M(1:3) **(Page No 25., I.No.5.33 of KPWD S.R 2015-16).**								
		Sqm							
	1st Cross road from Attur main road to 11th main road								
	BOX Drain								
	LHS								
	Ch: (56 - 82)		1	26		1.50	39.00		
	Ch: (121 - 145)		1	24		1.50	36.00		
	Ch: (152 - 177)		1	25		1.50	37.50		
	RHS								
	Ch: (121 - 145)		1	24		1.50	36.00		
	Ch: (152 - 177)		1	25		1.50	37.50		
							186.00		
	Deduction for damaged 10%						-18.60		
	Slabs								
	LHS								
	Ch: (0 - 56)		1	56	0.90		50.40		
	Ch: (82 - 121)		1	39	0.9		35.10		
	Ch: (145 - 152)		1	7	0.9		6.30		
	Ch: (177 - 209)		1	32	0.9		28.80		
	Deduction for Cross roads (7+4.9+5.5+7.1+6.5+ 5.5= - 36.5)		-1	36.5	0.90		-32.85		
	RHS								
	Ch: (0 - 121)		1	121	0.90		108.90		
	Ch: (145 - 152)		1	7	0.9		6.30		
	Ch: (177 - 209)		1	32	0.9		28.80		
	Deduction for Cross roads (7+4.9+5.5+7.1+6.5+ 5.5= - 36.5)		-1	36.5	0.90		-32.85		
							198.90		
	Deduction for damaged 10%						-19.89		
	2nd Cross road from 11th main road to Atturmain road								
	BOX Drain								
	RHS								
	Ch: (178 - 205)		1	27		1.50	40.50		
							40.50		
	Deduction for damaged 10%						-4.05		
	Slabs								
	LHS								
	Ch: (52 - 297)		1	245	0.90		220.50		

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	Deduction for Cross roads (7.4+7+7+6+5.5+4.9+6= - 43.8)		-1	43.8	0.90		-39.42		
	RHS								
	Ch: (52 - 178)		1	126	0.90		113.40		
	Ch: (205 - 297)		1	92	0.9		82.80		
	Deduction for Cross roads (7.4+7+7+6+5.5+4.9+6= - 43.8)		-1	43.8	0.90		-39.42		
							337.86		
	Deduction for damaged 10%						-33.79		
	3rd Cross road from Attur main road to 11th Main road								
	Slabs								
	LHS								
	Ch: (0 - 296)		1	296	0.75		222.00		
	Deduction for Cross roads (5.5+6+8+6.3+6+7.2+6.5+8.2+7+7= - 67.7)		-1	67.7	0.75		-50.78		
	RHS								
	Ch: (0 - 296)		1	296	0.90		266.40		
	Deduction for Cross roads (7.4+7+7+6+5.5+4.9+6= - 43.8)		-1	43.8	0.90		-39.42		
							398.21		
	Deduction for damaged 10%						-39.82		
	4th Cross from 9th main road to Atturmain road								
	BOX Drain								
	LHS								
	Ch: (126 - 150)		1	24		1.50	36.00		
	RHS								
	Ch: (221 - 244)		1	23		1.50	34.50		
							70.50		
	Deduction for damaged 10%						-7.05		
	Slabs								
	LHS								
	Ch: (0 - 126)		1	126	0.90		113.40		
	Ch: (150 - 260)		1	110	0.90		99.00		
	Deduction for Cross roads (6.2+6+6.3+8+7.7+6+6.7+6.5= - 53.4)		-1	53.4	0.90		-48.06		
	RHS								
	Ch: (0 - 221)		1	221	0.90		198.90		
	Deduction for Cross roads (6.2+6+6.3+8+7.7+6+6.7+6.5= - 53.4)		-1	53.4	0.90		-48.06		
							315.18		
	Deduction for damaged 10%						-31.52		
	5th Cross Road from Atturmain road to 2nd Cross road								

Sl. No	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	Slabs								
	LHS								
	Ch: (0 - 52)		1	52	0.90		46.80		
	Deduction for Cross roads (6= - 6)		-1	6	0.90		-5.40		
	RHS								
	Ch: (0 - 52)		1	52	0.90		46.80		
	Deduction for Cross roads (6= - 6)		-1	6	0.90		-5.40		
							82.80		
	Deduction for damaged 10%						-8.28		
	5th Cross road from cross road to (3rd main) Dead end								
	Slabs								
	LHS								
	Ch: (85 - 207)		1	122	0.90		109.80		
	Deduction for Cross roads (7.5+12.7= - 20.2)		-1	20.2	0.90		-18.18		
	RHS								
	Ch: (85 - 207)		1	122	0.90		109.80		
	Deduction for Cross roads (7.5+12.7= - 20.2)		-1	20.2	0.90		-18.18		
							183.24		
	Deduction for damaged 10%						-18.32		
	6th Cross road from Atturmain road to dead end (Cross Road)								
	BOX Drain								
	LHS								
	Ch: (0 - 19)		1	19		1.50	28.50		
	Ch: (24 - 82)		1	58		1.50	87.00		
	Ch: (89 - 181)		1	92		1.50	138.00		
	Ch: (267 - 272)		1	5		1.50	7.50		
	RHS								
	Ch: (189 - 256)		1	67		1.50	100.50		
							361.50		
	Deduction for damaged 10%						-36.15		
	Slabs								
	LHS								
	Ch: (189 - 256)		1	67	0.90		60.30		
	RHS								
	Ch: (0 - 267)		1	267	0.90		240.30		
	Deduction for Cross roads (5.5+6.1+7.5= - 19.1)		-1	19.1	0.90		-17.19		
							283.41		
	Deduction for damaged 10%						-28.34		

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	Cross road from 3rd main road (vidyanekethan english medium school) to dead end								
	BOX Drain								
	LHS								
	Ch: (29 - 120)		1	91		1.50	136.50		
	RHS								
	Ch: (36 - 120)		1	84		1.50	126.00		
							262.50		
	Deduction for damaged 10%						-26.25		
	Slabs								
	LHS								
	Ch: (0 - 29)		1	29	0.90		26.10		
	RHS								
	Ch: (0 - 36)		1	36	0.90		32.40		
	Deduction for Cross roads (6.7= - 6.7)		-1	6.7	0.90		-6.03		
							52.47		
	Deduction for damaged 10%						-5.25		
	Cross Road from 3rd main road to 9th main road								
	Slabs								
	LHS								
	Ch: (0 - 180)		1	180	0.75		135.00		
	Deduction for Cross roads (7+6+6.7+7+7= - 33.7)		-1	33.7	0.75		-25.28		
	RHS								
	Ch: (0 - 180)		1	180	0.75		135.00		
	Deduction for Cross roads (7+6+6.7+7+7= - 33.7)		-1	33.7	0.75		-25.28		
							219.45		
	Deduction for damaged 10%						-21.95		
	2nd main road from Yelahanka main road to Dead end								
	Slabs								
	LHS								
	Ch: (0 - 450)		1	450	0.90		405.00		
	Deduction for Cross roads (9.2+8.1+8+6.4+6.5= - 38.2)		-1	38.2	0.90		-34.38		
	RHS								
	Ch: (0 - 450)		1	450	0.75		337.50		
	Deduction for Cross roads (7+6+6.7+7+7= - 33.7)		-1	33.7	0.75		-25.28		
							682.85		
	Deduction for damaged 5%						-34.14		
							3341.97	**78.84**	**263480.62**
3	**Providing granite slabs** of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete. **10cm thick(Page No 25., I.No.5.31.2 of KPWD S.R 2015-16).**								
		Sqm							
	1st Cross road from Attur main road to 11th main road								
	BOX Drain								

Sl. No	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	for damaged						18.60		
	2nd Cross road from 11th main road to Atturmain road								
	BOX Drain								
	for damaged						4.05		
	4th Cross from 9th main road to Atturmain road								
	BOX Drain								
	for damaged						7.05		
	6th Cross road from Atturmain road to dead end (Cross Road)								
	BOX Drain								
	for damaged						36.15		
	Cross road from 3rd main road (vidyanekethan english medium school) to dead end								
	BOX Drain								
	for damaged						26.25		
							92.10	**794.88**	**73208.45**
4	Providing precast slab of **100 mm thick** including cost of all materials, labour, curing,transportation,loading ,unloading,etc ,complete as per the direction of engineer in charge- Data rate								
		Sqm							
	1st Cross road from Attur main road to 11th main road								
	for damaged						32.85		
	2nd Cross road from 11th main road to Atturmain road								
	for damaged						33.79		
	4th Cross from 9th main road to Atturmain road								
	for damaged						31.52		
	5th Cross Road from Atturmain road to 2nd Cross road								
	for damaged						8.28		
	5th Cross road from cross road to (3rd main) Dead end								
	for damaged						18.32		
	6th Cross road from Atturmain road to dead end (Cross Road)								
	for damaged						28.34		
	Cross road from 3rd main road (vidyanekethan english medium school) to dead end								
	for damaged						5.25		
	Cross Road from 3rd main road to 9th main road								
	for damaged						21.95		
	2nd main road from Yelahanka main road to Dead end								
	for damaged						34.14		
							214.43	**1834.00**	**393270.58**
5	KSRRB 300-1. **Earthwork excavation by manual means** in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 **(Page No141., I.No.19.1 of KPWD S.R 2015-16).**								
		Cum							
	Desilting & new drain /culvert								
	1st Cross road from Attur main road to 11th main road								
	LHS								
	Ch: (0 - 209)		1	209	0.50	0.600	62.70		
	RHS								
	Ch: (0 - 209)		1	209	0.50	0.600	62.70		
	2nd Cross road from 11th main road to Atturmain road								
	LHS								
	Ch: (52 - 297)		1	245	0.50	0.600	73.50		
	RHS								
	Ch: (52 - 297)		1	245	0.50	0.600	73.50		
	3rd Cross road from Attur main road to 11th Main road								

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	LHS								
	Ch: (0 - 296)		1	296	0.50	0.600	88.80		
	RHS								
	Ch: (0 - 296)		1	296	0.50	0.600	88.80		
	4th Cross from 9th main road to Atturmain road								
	LHS								
	Ch: (0 - 260)		1	260	0.50	0.600	78.00		
	RHS								
	Ch: (0 - 260)		1	260	0.50	0.600	78.00		
	5th Cross Road from Atturmain road to 2nd Cross road								
	LHS								
	Ch: (0 - 52)		1	52	0.50	0.700	18.20		
	RHS								
	Ch: (0 - 52)		1	52	0.50	0.700	18.20		
	5th Cross road from cross road to (3rd main) Dead end								
	LHS								
	Ch: (85 - 207)		1	122	0.50	0.700	42.70		
	RHS								
	Ch: (85 - 207)		1	122	0.50	0.700	42.70		
	6th Cross road from Atturmain road to dead end (Cross Road)								
	LHS								
	Ch: (0 - 272)		1	272	0.50	0.700	95.20		
	RHS								
	Ch: (0 - 272)		1	272	0.50	0.700	95.20		
	Cross road from 3rd main road (vidyanekethan english medium school) to dead end								
	LHS								
	Ch: (0 - 120)		1	120	0.50	0.700	42.00		
	RHS								
	Ch: (0 - 120)		1	120	0.50	0.700	42.00		
	Cross Road from 3rd main road to 9th main road								
	LHS								
	Ch: (0 - 180)		1	180	0.50	0.700	63.00		
	RHS								
	Ch: (0 - 180)		1	180	0.50	0.700	63.00		
	Culvert								
			1	7	1.50	0.800	8.40		
	2nd main road from Yelahanka main road to Dead end								
	LHS								
	Ch: (0 - 450)		1	450	0.50	0.700	157.50		
	RHS								
	Ch: (0 - 450)		1	450	0.50	0.700	157.50		
							1451.60	**177.88**	**258210.61**
6	KSRB 4-1.2 : Providing and laying in **position plain cement concrete of mix1:3:6** with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregtes @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted,in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2 **(Page No 12., I.No.4.2 of KPWD S.R 2015-16).**								
		Cum							
	Cross Road from 3rd main road to 9th main road								
	LHS								
			1	7	1.50	0.100	1.05		
							1.05	**5236.92**	**5498.77**
7	KSRB 5.2-3. **Providing and constructing granite / trap / basalt size stone masonry** in foundation with cement mortar 1:6, stone hammered dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 **(Page No 23., I.No.5.6 of KPWD S.R 2015-16).**								

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
		Cum							
	Cross Road from 3rd main road to 9th main road								
	LHS								
			2	7	0.60	0.65	5.46		
							5.46	**4135.32**	**22578.85**
8	1 KSRB 15.1.1 **Providing flush pointing to square rubble,** course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. **(Page No 112., I.No.15.1 of KPWD S.R 2015-16).**								
		Sqm							
	Cross Road from 3rd main road to 9th main road								
	LHS								
			2	7		0.65	9.10		
							9.10	**99.36**	**904.18**
9	KSRB 4-1.6 ; Providing and laying in position **plain cement concrete of mix 1:2:4 with cement** @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation,plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 **(Page No 12., I.No.4.6 of KPWD S.R 2015-16).**								
		Sqm							
	Cross Road from 3rd main road to 9th main road								
	LHS								
			2	7	0.60	0.10	0.84		
							0.84	**5490.72**	**4612.20**
10	Providing precast slab of **250mm thick** including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge- Data rate								
		Sqm							
	Cross Road from 3rd main road to 9th main road								
	LHS								
			1	7	1.50		10.50		
							10.50	**5111.00**	**53665.50**

(2.1)

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	ROAD WORKS								
11	KSRRB M300-14. **Excavation for roadwork in all type of soil with hydraulic excavator** of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 **(Page No 142., I.No.19.14 of KPWD S.R 2015-16).**								
		Cum							
	1st Cross road from Attur main road to 11th main road								
	Ch: (0 - 296)		1	296	6.30	0.30	559.44		
	Pipe cutting		1	296	2.00	0.40	236.80		
	2nd Cross road from 11th main road to Atturmain road								
	Ch: (0 - 297)		1	297	6.30	0.30	561.33		
	Pipe cutting		1	297	2.00	0.40	237.60		
	3rd Cross road from Attur main road to 11th Main road								
	Ch: (0 - 302)		1	302	5.90	0.30	534.54		
	Pipe cutting		1	302	2.00	0.40	241.60		
	4th Cross from 9th main road to Atturmain road								
	Ch: (0 - 260)		1	260	5.90	0.30	460.20		
	Pipe cutting		1	260	2.00	0.40	208.00		
	5th Cross Road from Atturmain road to 2nd Cross road								
	Ch: (0 - 52)		1	52	4.50	0.30	70.20		
	Pipe cutting		1	52	2.00	0.40	41.60		
	5th Cross road from cross road to (3rd main) Dead end								
	Ch: (0 - 207)		1	207	4.90	0.30	304.29		
	Pipe cutting		1	207	2.00	0.40	165.60		
	6th Cross road from Atturmain road to dead end (Cross Road)								
	Ch: (0 - 273)		1	273	6.00	0.30	491.40		
	Pipe cutting		1	273	2.00	0.40	218.40		
	Cross road from 3rd main road (vidyanekethan english medium school) to dead end								
	Ch: (0 - 120)		1	120	4.60	0.30	165.60		
	Pipe cutting		1	120	2.00	0.40	96.00		
	Cross Road from 3rd main road to 9th main road								
	Ch: (0 - 180)		1	180	3.80	0.30	205.20		
	Pipe cutting		1	180	2.00	0.40	144.00		
	2nd main road from Yelahanka main road to Dead end								
	Ch: (0 - 315)		1	315	4.20	0.30	396.90		
	Pipe cutting		1	315	2.00	0.40	252.00		
	Ch: (315 - 450)		1	135	3.80	0.30	153.90		
	Pipe cutting		1	135	2.00	0.40	108.00		
							5852.60	**143.32**	**838794.63**
12	KSRB 2.6 : Providing and **filling dust** in foundation upto plinth to required depth for sub soil treatment including watering ramming with all lead and lift complete as per specifications specification. No. KBS 2.10.2, **(Rate Analysis)**								
		Cum							
	1st Cross road from Attur main road to 11th main road								
	Pipe cutting		1	296	3.00	0.25	222.00		
	2nd Cross road from 11th main road to Attura main road								
	Pipe cutting		1	297	2.00	0.25	148.50		
	3rd Cross road from Attur main road to 11th Main road								
	Pipe cutting		1	302	2.00	0.25	151.00		
	4th Cross from 9th main road to Atturmain road								
	Pipe cutting		1	260	2.00	0.25	130.00		
	5th Cross Road from Atturmain road to 2nd Cross road								
	Pipe cutting		1	52	2.00	0.25	26.00		
	5th Cross road from cross road to (3rd main) Dead end								
	Pipe cutting		1	207	2.00	0.25	103.50		
	6th Cross road from Atturmain road to dead end (Cross Road)								

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	Pipe cutting		1	273	2.00	0.25	136.50		
	Cross road from 3rd main road (vidyanekethan english medium school) to dead end								
	Pipe cutting		1	120	2.00	0.25	60.00		
	Cross Road from 3rd main road to 9th main road								
	Pipe cutting		1	180	2.00	0.25	90.00		
	2nd main road from Yelahanka main road to Dead end								
	Pipe cutting		1	315	2.00	0.25	157.50		
	Pipe cutting		1	135	2.00	0.25	67.50		
							1292.50	**1162.85**	**1502983.63**
13	KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3 (Page No 148., I.No.19.64 of KPWD S.R 2015-16).								
		Sqm							
	1st Cross road from Attur main road to 11th main road								
	Ch: (0 - 270)		1	270	6.30		1701.00		
	2nd Cross road from 11th main road to Attura main road								
	Ch: (15 - 297)		1	282	6.30		1776.60		
	3rd Cross road from Attur main road to 11th Main road								
	Ch: (0 - 296)		1	296	5.90		1746.40		
	4th Cross from 9th main road to Atturmain road								
	Ch: (0 - 260)		1	260	5.90		1534.00		
	5th Cross Road from Atturmain road to 2nd Cross road								
	Ch: (0 - 52)		1	52	4.50		234.00		
	5th Cross road from cross road to (3rd main) Dead end								
	Ch: (0 - 207)		1	207	4.90		1014.30		
	6th Cross road from Atturmain road to dead end (Cross Road)								
	Ch: (0 - 273)		1	273	6.00		1638.00		
	Cross road from 3rd main road (vidyanekethan english medium school) to dead end								
	Ch: (0 - 120)		1	120	4.60		552.00		
	Cross Road from 3rd main road to 9th main road								
	Ch: (0 - 180)		1	180	3.80		684.00		
	2nd main road from Yelahanka main road to Dead end								
	Ch: (0 - 315)		1	315	4.20		1323.00		
	Ch: (315 - 450)		1	135	3.80		513.00		
							12716.30	**4.86**	**61801.22**
14	KSRRB M400-6.1. Construction of **granular sub-base** by providing close graded material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method.Close graded granular sub-base material as per 400-1 For Grading- II Material **(Page No 154., I.No.20.4.2 of KPWD S.R 2015-16).**								
		Cum							
	1st Cross road from Attur main road to 11th main road								
	Ch: (270 - 296)		1	26	5.00	0.15	19.50		
	2nd Cross road from 11th main road to Attura main road								
	Ch: (0 - 15)		1	15	4.00	0.15	9.00		
	3rd Cross road from Attur main road to 11th Main road								
	Ch: (296 - 302)		1	6	2.70	0.15	2.43		
	2nd main road from Yelahanka main road to Dead end								
	Ch: (315 - 450)		1	135	3.80	0.15	76.95		
							107.88	**1622.16**	**174998.62**
15	KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (Page No 157., I.No 20.18 of KPWD S.R 2015-16).								

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
		Cum							
	ROAD								
	1st Cross road from Attur main road to 11th main road								
	Ch: (0 - 270)		1	270	6.30	0.25	425.25		
	2nd Cross road from 11th main road to Attura main road								
	Ch: (15 - 297)		1	282	6.30	0.25	444.15		
	3rd Cross road from Attur main road to 11th Main road								
	Ch: (0 - 296)		1	296	5.90	0.25	436.60		
	4th Cross from 9th main road to Atturmain road								
	Ch: (0 - 260)		1	260	5.90	0.25	383.50		
	5th Cross Road from Atturmain road to 2nd Cross road								
	Ch: (0 - 52)		1	52	4.50	0.25	58.50		
	5th Cross road from cross road to (3rd main) Dead end								
	Ch: (0 - 207)		1	207	4.90	0.25	253.58		
	6th Cross road from Atturmain road to dead end (Cross Road)								
	Ch: (0 - 273)		1	273	6.00	0.25	409.50		
	Cross road from 3rd main road (vidyanekethan english medium school) to dead end								
	Ch: (0 - 120)		1	120	4.60	0.25	138.00		
	Cross Road from 3rd main road to 9th main road								
	Ch: (0 - 180)		1	180	3.80	0.25	171.00		
	2nd main road from Yelahanka main road to Dead end								
	Ch: (0 - 315)		1	315	4.20	0.25	330.75		
	4th main road from Yelahanka main road to cross road (Vidyanekethan english medium school)								
	Ch: (0 - 452)		1	452	3.80	0.25			
	PIPE CUTTING								
	1st Cross road from Attur main road to 11th main road								
	Ch: (0 - 270)		1	270	3.00	0.15	121.50		
	2nd Cross road from 11th main road to Attura main road								
	Ch: (0 - 302)		1	302	2.00	0.15	90.60		
	3rd Cross road from Attur main road to 11th Main road								
	Ch: (0 - 296)		1	296	2.00	0.15	88.80		
	4th Cross from 9th main road to Atturmain road								
	Ch: (0 - 260)		1	260	2.00	0.15	78.00		
	5th Cross Road from Atturmain road to 2nd Cross road								
	Ch: (0 - 52)		1	52	2.00	0.15	15.60		
	5th Cross road from cross road to (3rd main) Dead end								
	Ch: (0 - 207)		1	207	2.00	0.15	62.10		
	6th Cross road from Atturmain road to dead end (Cross Road)								
	Ch: (0 - 273)		1	273	2.00	0.15	81.90		
	Cross road from 3rd main road (vidyanekethan english medium school) to dead end								
	Ch: (0 - 120)		1	120	2.00	0.15	36.00		
	Cross Road from 3rd main road to 9th main road								
	Ch: (0 - 180)		1	180	2.00	0.15	54.00		
	2nd main road from Yelahanka main road to Dead end								
	Ch: (0 - 315)		1	315	2.00	0.15	94.50		
	Ch: (315 - 450)		1	135	2.00	0.15	40.50		
							3814.33	1713.96	6537600.48
16	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WBM,WMM ,including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502 (Page No 160., I.No.21.6 of KPWD S.R 2015-16).								
		Sqm							
	1st Cross road from Attur main road to 11th main road								
	Ch: (0 - 270)		1	270	6.30		1701.00		
	2nd Cross road from 11th main road to Attura main road								
	Ch: (15 - 297)		1	282	6.30		1776.60		
	3rd Cross road from Attur main road to 11th Main road								
	Ch: (0 - 296)		1	296	5.90		1746.40		
	4th Cross from 9th main road to Atturmain road								

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	Ch: (0 - 260)		1	260	5.90		1534.00		
	5th Cross Road from Atturmain road to 2nd Cross road								
	Ch: (0 - 52)		1	52	4.50		234.00		
	5th Cross road from cross road to (3rd main) Dead end								
	Ch: (0 - 207)		1	207	4.90		1014.30		
	6th Cross road from Atturmain road to dead end (Cross Road)								
	Ch: (0 - 273)		1	273	6.00		1638.00		
	Cross road from 3rd main road (vidyanekethan english medium school) to dead end								
	Ch: (0 - 120)		1	120	4.60		552.00		
	Cross Road from 3rd main road to 9th main road								
	Ch: (0 - 180)		1	180	3.80		684.00		
	2nd main road from Yelahanka main road to Dead end							26	27.56
	Ch: (0 - 315)		1	315	4.20		1323.00	1.56	
							12203.30	28.08	342668.66
17	KSRRB 500-7. Providing and applying **tack coat** using 80/100 grade Bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm , heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 **(Page No 160., I.No.21.7 of KPWD S.R 2015-16).**								
		Sqm							
	1st Cross road from Attur main road to 11th main road								
	Ch: (0 - 270)		1	270	6.30		1701.00		
	2nd Cross road from 11th main road to Attura main road								
	Ch: (15 - 297)		1	282	6.30		1776.60		
	3rd Cross road from Attur main road to 11th Main road								
	Ch: (0 - 296)		1	296	5.90		1746.40		
	4th Cross from 9th main road to Atturmain road								
	Ch: (0 - 260)		1	260	5.90		1534.00		
	5th Cross Road from Atturmain road to 2nd Cross road								
	Ch: (0 - 52)		1	52	4.50		234.00		
	5th Cross road from cross road to (3rd main) Dead end								
	Ch: (0 - 207)		1	207	4.90		1014.30		
	6th Cross road from Atturmain road to dead end (Cross Road)								
	Ch: (0 - 273)		1	273	6.00		1638.00		
	Cross road from 3rd main road (vidyanekethan english medium school) to dead end								
	Ch: (0 - 120)		1	120	4.60		552.00		
	Cross Road from 3rd main road to 9th main road								
	Ch: (0 - 180)		1	180	3.80		684.00		
	2nd main road from Yelahanka main road to Dead end							11	11.66
	Ch: (0 - 315)		1	315	4.20		1323.00	0.66	
							12203.30	11.88	144975.20
18	KSRRB M500- 15. Providing, laying **dense graded bituminous macadam** using 40/60 THP capacity H.M.P with Mechanical paver Gr-II(50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with wheeled , vibratory and tandeem rollers to achieve the desired density including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.507 **(Page No 161., I.No.21.17.6 of KPWD S.R 2015-16).**								
		Cum							
	1st Cross road from Attur main road to 11th main road								
	Ch: (0 - 270)		1	270	6.30	0.05	85.05		
	2nd Cross road from 11th main road to Attura main road								
	Ch: (15 - 297)		1	282	6.30	0.05	88.83		
	3rd Cross road from Attur main road to 11th Main road								
	Ch: (0 - 296)		1	296	5.90	0.05	87.32		
	4th Cross from 9th main road to Atturmain road								
	Ch: (0 - 260)		1	260	5.90	0.05	76.70		
	5th Cross Road from Atturmain road to 2nd Cross road								
	Ch: (0 - 52)		1	52	4.50	0.05	11.70		

	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	5th Cross road from cross road to (3rd main) Dead end								
	Ch: (0 - 207)		1	207	4.90	0.05	50.72		
	6th Cross road from Atturmain road to dead end (Cross Road)								
	Ch: (0 - 273)		1	273	6.00	0.05	81.90		
	Cross road from 3rd main road (vidyanekethan english medium school) to dead end								
	Ch: (0 - 120)		1	120	4.60	0.05	27.60		
	Cross Road from 3rd main road to 9th main road								
	Ch: (0 - 180)		1	180	3.80	0.05	34.20		
	2nd main road from Yelahanka main road to Dead end							5929 = 6284	
	Ch: (0 - 315)		1	315	4.20	0.05	66.15	355	
							610.17	**6366.60**	**3884676.49**
19	KSRRB M500- 15. Providing, laying **bituminousConcrete** using **40/60 THP** capacity H.M.P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 6% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with wheeled , vibratory and tandeem rollers to achieve the desired density including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.509 **(Page No 164., I.No.21.22.6 of KPWD S.R 2015-16).**								
		Cum							
	1st Cross road from Attur main road to 11th main road								
	Ch: (0 - 270)		1	270	6.30	0.035	59.54		
	2nd Cross road from 11th main road to Attura main road								
	Ch: (15 - 297)		1	282	6.30	0.035	62.18		
	3rd Cross road from Attur main road to 11th Main road								
	Ch: (0 - 296)		1	296	5.90	0.035	61.12		
	4th Cross from 9th main road to Atturmain road								
	Ch: (0 - 260)		1	260	5.90	0.035	53.69		
	5th Cross Road from Atturmain road to 2nd Cross road								
	Ch: (0 - 52)		1	52	4.50	0.035	8.19		
	5th Cross road from cross road to (3rd main) Dead end								
	Ch: (0 - 207)		1	207	4.90	0.035	35.50		
	6th Cross road from Atturmain road to dead end (Cross Road)								
	Ch: (0 - 273)		1	273	6.00	0.035	57.33		
	Cross road from 3rd main road (vidyanekethan english medium school) to dead end								
	Ch: (0 - 120)		1	120	4.60	0.035	19.32		
	Cross Road from 3rd main road to 9th main road								
	Ch: (0 - 180)		1	180	3.80	0.035	23.94		
	2nd main road from Yelahanka main road to Dead end							6687	7083
	Ch: (0 - 315)		1	315	4.20	0.035	46.31	410	
							427.12	**7699.32**	**3288498.91**
20	KSRRB M600-1. Construction of **dry lean cement concrete mix M5** with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383,) aggregate cement ratio not to exceed 15:1,aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. MORTH Specification No. 601 (Page No,-173, I.No.22.1 of KPWD S.R 2015-16)								
		Cum							
	1st Cross road from Attur main road to 11th main road								
	Ch: (270 - 296)		1	26	5.00	0.125	16.25		
	2nd Cross road from 11th main road to Attura main road								
	Ch: (0 - 15)		1	15	4.00	0.125	7.50		

	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	3rd Cross road from Attur main road to 11th Main road								
	Ch: (296 - 302)		1	6	2.70	0.125	2.03		
	2nd main road from Yelahanka main road to Dead end								
	Ch: (315 - 450)		1	135	3.80	0.125	64.13		
							89.90	**3900.96**	**350696.30**
21	Cement concrete pavement.Construction of **un-reinforced plain cement concrete** pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 **design mix M30**(at 360 kg per cum coarse aggregate @ 0.69 cum and fine aggregate @0.46 cum) , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 eaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications.(Page No 174., I.No.22.6.1 of KPWD S.R 2015-16).								
		Cum							
	1st Cross road from Attur main road to 11th main road								
	Ch: (270 - 296)		1	26	5.00	0.175	22.75		
	2nd Cross road from 11th main road to Attura main road								
	Ch: (0 - 15)		1	15	4.00	0.175	10.50		
	3rd Cross road from Attur main road to 11th Main road								
	Ch: (296 - 302)		1	6	2.70	0.175	2.84		
	2nd main road from Yelahanka main road to Dead end								
	Ch: (315 - 450)		1	135	3.80	0.175	89.78		
							125.86	**5957.28**	**749783.26**
22	Providing **groove cutting** for Concrete pavement width of 5mm to 10mm and depth 80mm-100mm including cost of cutting machine, generator & HOM of machinery, including cost of blade,coolant etc., including cleaning of groove & providing sand and hot bitumen fillars, and filler metal etc., including cost of conveyance of all materials, labour, lead and lift charges and all other incidental charges as per drawing and as per specifications.**(Page No 172., I.No.22.8.1 of KPWD S.R 2015-16).**								
		m							
	LONGITUDINAL								
	1st Cross road from Attur main road to 11th main road								
	Ch: (270 - 296)		1	26			26.00		
	2nd Cross road from 11th main road to Attura main road								
	Ch: (0 - 15)		1	15			15.00		
	3rd Cross road from Attur main road to 11th Main road								
	Ch: (296 - 302)		1	6			6.00		
	2nd main road from Yelahanka main road to Dead end								
	Ch: (315 - 450)		1	135			135.00		
	LATERAL								
	1st Cross road from Attur main road to 11th main road								
	Ch: (270 - 296)		9	5			45.00		
	2nd Cross road from 11th main road to Attura main road								
	Ch: (0 - 15)		5	4			20.00		
	3rd Cross road from Attur main road to 11th Main road								
	Ch: (296 - 302)		2	2.7			5.40		
	2nd main road from Yelahanka main road to Dead end								
	Ch: (315 - 450)		45	3.8			171.00		

Sl No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
							423.40	124.20	52586.28
	ROAD FURNITURES								
23	KSRRB M800-13. Providing and laying of **hot applied thermoplastic compound** 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 **(Page No 181., I.No.24.15 of KPWD S.R 2015-16).**								
		Sqm							
	1st Cross road from Attur main road to 11th main road								
	Ch: (0 - 270)		2.5	270	0.10		67.50		
	2nd Cross road from 11th main road to Attura main road								
	Ch: (15 - 297)		2.5	282	0.10		70.50		
	3rd Cross road from Attur main road to 11th Main road								
	Ch: (0 - 296)		2.5	296	0.10		74.00		
	4th Cross from 9th main road to Atturmain road								
	Ch: (0 - 260)		2	260	0.10		52.00		
	5th Cross Road from Atturmain road to 2nd Cross road								
	Ch: (0 - 52)		2	52	0.10		10.40		
	5th Cross road from cross road to (3rd main) Dead end								
	Ch: (0 - 207)		2	207	0.10		41.40		
	6th Cross road from Atturmain road to dead end (Cross Road)								
	Ch: (0 - 273)		2	273	0.10		54.60		
	Cross road from 3rd main road (vidyanekethan english medium school) to dead end								
	Ch: (0 - 120)		2	120	0.10		24.00		
	Cross Road from 3rd main road to 9th main road								
	Ch: (0 - 180)		2	180	0.10		36.00		
	2nd main road from Yelahanka main road to Dead end								
	Ch: (0 - 315)		2.5	315	0.10		78.75		
							509.15	**473.04**	**240848.32**
	Sub Total								**19476521.33**
24	Cost towards Design Report and Detailed Estimate,PMC/Third party								**389530.43**
25	**Cost of Plastic@ 8% of bitumen qty for BC**	**Kg**	1	4817.86				**27.00**	**130082.30**
26	Misellenous and other charges								**3865.95**
	Grand Total							Rs.	**20000000.00**

Certificate:-

1. That the workspot inspected by me and found work is necessary.
2. That the area comes with in the Bruhat Bangalore Mahanagara Palike Limits.
3. That the rates are adopted based on the PWD SR of 2015-16
4. That the provisions made in the estimate are necessary and quite essential.

Asst. Engineer
Ward No-03
BBMP

AEE
Yelhanka Sub Division
BBMP

Executive Engineer
Yelhanka Division
BBMP

Administrative Sanction for Rs. 200.00 Lacs
Two Hundred Lacs
- Only -
is accorded from P. 3106-
2015-16.
Subject
to conditions contained in this Head memo
No. EE/YNK/AA/15/2017-18 29.7.17

Executive Engineer

Technical Sanction
Accorded For Rs 200.00 Lacs
Head of A/C.P. 3106
OFFICE NO: CE/YNK/TS/72/16-17 Dt. 23.11.2016

TA CE (YNK)